Thinking strategically about communication in planning for Mars Sample Return: considering public participation

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Thinking strategically about communication

Strategic communication: "the art of presenting ideas clearly, concisely, persuasively, and systematically in a timely manner to the right people...maximizing available resources and positioning your organization to be proactive instead of reactive, advancing your mission and actualizing your vision."

- * What is the purpose of your communications?
- * What are you communicating about?
- * Who are you communicating with, and why (where/when/how)?

Communication models/theories

Cognitive deficit model: one-way transmission.

Goal: persuasion. (Coercion?)

Public Understanding of Science (PUS): a cognitive-deficit framework for science communication.

Debunking: "I'm right, you're wrong, here's why."

Ritual theory: communication serves social and symbolic as well as practical ends. Communication is culture.

Interactive (participatory, dialogic): two-way, ongoing communication.

Goal: understanding.

Participatory communication

Ongoing, interactive, open-ended.

Giving voice to underrepresented groups.

Valuing expert and "local" knowledge.

Accepting different world views.

Emphasizing process over outcome.

Democratizing expertise.

Ensuring that citizens and policy makers are informed.

Enabling participation

Established methods: public hearings, public comment processes, expert advisory committees

Philosophy: "inform and educate"

Practice: "command and control"

Perception: "decide, announce, defend"

("invite, inform, ignore")

New methods: citizen advisory committees, citizen juries, policy dialogues...

Philosophy: diversity, full range of perspectives

Practice: engage, listen, use, report

Perception: openness

Participation in MSR planning

Why?

Informing citizens about MSR science goals and objectives.

Engaging citizens in sample return and containment decision making. Involving the media in the process.

The challenge

Need to be prepared to talk about a broad range of issues, in depth, in English, before, during, and after MSR.

Report of the iMARS Working Group, June 1, 2008

"Activities related to the SRF(s) would need to be started well in advance of the sample return, since they would have to deal with public engagement and facility approval processes, as well as with technical aspects. The site selection of the SRF(s) is identified as a critical early step."

CH. VII – Public outreach and education: "During Phase I of iMARS, there was very little opportunity to promote an MSR mission to the general public or to produce any educational materials. The iMARS team did, however, recognize that public outreach and education would be essential components of any future mission and have highlighted this issue as an important part of the work of the IMSI."

Conclusions – iMARS Phase II, Forward Planning: "Initiate public engagement. We need to get early information out about the value of the mission and our approaches to risk management."

The issues....

9/8-9/10, Washington, DC, SSB review of planetary protection for MSR

- Mike Zolensky, JSC, lessons learned from Stardust sample return: can't be too careful, UTTR=lousy return site, database for returned samples difficult to design and use, controversy over extent of preliminary sample analysis...
- Gigi Qwik-Gonvall, U. Pittsburgh Medical Center: Earth hosts more than 10 million+ species of bacteria (only a few thousand described), life on Earth far more diverse than previously thought; far more horizontal gene transfer between organisms than previously thought....
 - * Caution about PP requirements for MSR missions is appropriate.
- Priscu: "dust" in Antarctic glacial ice is 80% organic, microbes found many Antarctic environments, Antarctica may be world's biggest wetland (continental network of subsurface lakes).
 - *Based on what's known about Antarctic and martian environments, expect to find extant subsurface life on Mars.

Conclusions

Public participation is democratic

Participation is better than no participation

No magic formula for enabling participation

Participation could help democratize science and technology policy making and revivify civic life

Participation can minimize conflict, empower citizens, temper influence of special interests, help build government-citizen partnerships

The candidates on participation

Obama '08 space policy statement:

"Supporting Open Government Initiatives: Obama will engage our public servants in two-way dialogs with the public to discuss the national agenda for space, to show how their tax dollars are being used, and to solicit feedback how to better address the needs of the nation."

McCain '08 space policy statement:

No mention of participation.

Questions?

Comments?